

Abstract

[0036] A magnetic random access memory (MRAM)
5 including an array of magnetic memory cells and a
 plurality of word and bit lines connecting columns and
 rows of the memory cells. Each memory cell has a magnetic
 reference layer and a magnetic data layer. Each reference
 layer and each data layer has a magnetization that is
10 switchable between two states under the influence of a
 magnetic field. The MRAM also includes a plurality of
 heating elements each proximate to a respective reference
 layer. Each heating element provides in use for localized
 heating of the respective reference layer so as to reduce
15 the coercivity of the reference layer to facilitate
 switching of the reference layer without switching of the
 data layers.